1. (Previously Presented) A burner for a heat generator, comprising:

a swirl generator for a combustion-air flow and means for injecting fuel for producing a main flow;

a combustion chamber arranged downstream of the swirl generator; and

a cavity arranged between the swirl generator and the combustion chamber, in which cavity a secondary flow can be produced that encloses the main flow.

2. (Previously Presented) The burner as claimed in claim 1, wherein the cavity has an annular toroidal shape.

3. (Previously Presented) The burner as claimed in claim 1, further comprising injection means for fuel and for combustion air arranged in the cavity.

4. (Previously Presented) The burner as claimed in claim 1, further comprising a mixing section arranged between the swirl generator and the cavity.

5. (Previously Presented) The burner as claimed in Claim 1, further comprising a mixing section arranged between the cavity and the combustion chamber.

6. (Currently Amended) The burner as claimed in Claim 1, wherein the secondary flow is configured and arranged to be used as a pilot flame.

7. (Previously Presented) A pilot burner for the burner of a heat generator, the burner having a swirl generator for a combustion-air flow and means for injecting fuel for producing a main flow, and a combustion chamber being arranged downstream of the burner, the pilot burner comprising:

a cavity arranged between the swirl generator and the combustion chamber and in which a secondary flow can be produced.

8. (Previously Presented) The pilot burner as claimed in claim 7, wherein the cavity has an annular toroidal shape.

9. (Previously Presented) The pilot burner as claimed in claim 7, further comprising injection means for fuel and for combustion air arranged in the cavity.